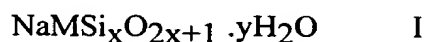


Claims

1. A multi-phase detergent tablet for use in a washing machine, the tablet comprising a first phase comprising alkalisising agent, and a second phase comprising acidifying agent,
 a and wherein the multi-phase tablet has an initial pH of at least 9, ~~preferably at least 9.5~~
 a and a pH rate change index (ΔpH) of no more than about 0.17, ~~preferably no more than~~
 a ~~about 0.15~~ units/min.

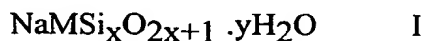
2. A multi-phase detergent tablet for use in a washing machine, the tablet comprising
 a) a first phase comprising silicate alkalisising agent including at least a crystalline layered sodium silicate of general formula I



- a wherein M is sodium or hydrogen, x is a number from 1.9 to 22, ~~preferably from 1.9 to 4~~
 a and y is a number from 0 to 30, ~~preferably from 0 to 20~~, and
 b) a second phase comprising a (bi)carbonate/acid disrupting agent,
 and wherein the multi-phase tablet has an initial pH of at least 9, preferably at least 9.5
 and a pH rate change index (ΔpH) of no more than about 0.17 units/min, ~~preferably no~~
 a ~~more than about 0.15~~ units/min.

- a 3. A multi-phase detergent tablet according to claim 1 or 2 containing silicate alkalisising
 a agent and acid in a weight ratio of at least about 1:1, ~~preferably at least about 5:1, and~~
 a ~~more preferably in the range from about 8:1 to about 25:1.~~

4. A multi-phase detergent tablet for use in a washing machine, the tablet comprising
 a) a first phase comprising silicate alkalisising agent including at least a crystalline layered sodium silicate of general formula I



- a wherein M is sodium or hydrogen, x is a number from 1.9 to 22, ~~preferably from 1.9 to 4~~
 and y is a number from 0 to 30, ~~preferably from 0 to 20~~, and
 b) a second phase comprising a (bi)carbonate/acid disrupting agent,

and wherein the tablet contains silicate alkalising agent and acid in a weight ratio of at least about 1:1, ~~preferably at least about 5:1.~~

5. A multi-phase detergent tablet according to ~~any of claims 1 to 4~~ ^{claim 1, 2 or 4} wherein the silicate alkalising agent comprises at least about 25%, preferably at least about 50% and more preferably at least about 75% by weight thereof of the crystalline layered sodium silicate of general formula I.

6. A multi-phase detergent tablet according to ~~any of claims 1 to 5~~ ^{claim 1, 2 or 4} comprising from about 1% to about 25%, ~~preferably from about 5% to about 20%, more preferably from about 8% to about 18%~~ of silicate alkalising agent by weight of the tablet.

7. A multi-phase detergent tablet according to ~~any of claims 1 to 6~~ ^{claim 1, 2, or 4} comprising from about 0.1% to about 10%, ~~preferably from about 0.5% to about 5%, more preferably from about 0.8% to about 3%~~ of acid by weight of the tablet.

8. A multi-phase detergent tablet according to ~~any of claims 1 to 7~~ ^{claim 1, 2 or 4} wherein the first phase is composed of a built active detergent composition comprising by weight thereof:

- (1) from about 1% to about 12%, ~~preferably from about 5% to about 10%~~ of the crystalline layered sodium silicate of general formula I,
- (2) from 0% to about 70%, ~~preferably from about 10% to about 60%~~ of polyphosphate, zeolite, and/or polycarboxylate builders,
- (3) from 0% to about 30%, ~~preferably from about 5% to about 20%~~ of carbonate and/or bicarbonate, and
- (4) from 0% to about 10%, ~~preferably from 0% to about 5%~~ of amorphous silicate.

9. A multi-phase detergent tablet according to ~~any of claims 1 to 8~~ ^{claim 1, 2 or 4} wherein the second phase dissolves in a washing machine within 5 minutes.

10. A multi-phase tablet according to ~~any of claims 1 to 9~~ ^{claim 1, 2 or 4} having a child bite strength (CBS) of at least about 10 kg, ~~preferably at least about 14 kg.~~

11. A multi-phase detergent tablet according to ~~any of claims 1 to 10~~ ^{claim 1, 2, or 4} wherein the first phase is in the form of a shaped body formed by compression at a pressure greater than that of the second phase.

claim 1, 2 or 4
12. A multi-phase detergent tablet according to ~~any of claims 1 to 11~~ wherein the second phase is compressed at a pressure of less than about 350 kg/cm².

claim 1, 2 or 4
13. A multi-phase detergent tablet according to ~~any of claims 1 to 12~~ wherein the first phase is compressed at a pressure of at least about 350 kg/cm².

claim 1, 2 or 4
14. A multi-phase detergent tablet according to ~~any of claims 1 to 13~~ wherein
a) the first phase is in the form of a shaped body having at least one mould therein; and
b) the second phase is in the form of a particulate solid compressed within said mould.

claim 1, 2 or 4
15. A multi-phase detergent tablet according to ~~any of claims 1 to 14~~ wherein the first and/or second phases additionally comprises a binder selected from the group consisting of sugar and sugar derivatives, starch and starch derivatives, inorganic and organic polymers.